

Now in its
2nd year!

FREE TEACHING GUIDE and POSTER for **GRADE 4**

Part 1 of 2

American Journeys: Learn About Illinois

You'll Find:

- Ready-to-use Lessons and Reproducibles
- Maps of Illinois and the United States
- At-Home Activities for Families



**Meet Illinois
Education
Standards and
practice for the
ISAT!**

(See back cover for standards chart.)

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LESSON OVERVIEWS

Lesson 1: Track Your Trip



Language Arts



Geography



Math

ISAT Test Prep Skill: Physical Science

Student goals: Learn how to read a map and identify key cities, landmarks, rivers, state boundaries, and train routes; solve basic mathematical problems

Time required: 40 minutes

Materials required: Classroom Map, **Track Your Trip** student reproducible 1, push pins, colored pencils, pen or pencil

Directions:

1. Display the map in the classroom at a level where all students can view it and reach it.
2. Review the components of a map legend with the class (i.e., ordinal directions, legend, and scale measurement).

Ask Students:

- Can you find three cities with a population between 50,000 and 150,000?
 - Which states border Illinois?
 - Which part of Illinois produces wheat?
a) north; b) south; c) central;
d) northwest
3. Distribute **Track Your Trip** student reproducible 1 to each student and read it aloud with the class.
 4. Have students answer the questions by referencing the map.

(Answer Key: 1. c; 2. b; 3. d; 4. d; 5. a; 6. c.)

5. As a class, review students' answers.

Wrap-up: Have students choose a location and track their own train routes. Have them think about the states they will travel through and the sites they will see along the way. Ask them to illustrate what they see as train passengers and write a paragraph that explains their drawings.

Dear Teachers,

We are delighted to share this FREE education program to help you teach your students **language arts, science, math, and geography** skills as outlined by the Illinois Department of Education.

Now in its second year, **American Journeys: Learn About Illinois**, generously supported by the **Illinois Department of Transportation** and **Amtrak**, provides easy-to-use lessons and activities that support Illinois state curriculum and provide test-taking practice for the ISAT.

We hope you enjoy the program!

George Weber
Illinois Department
of Transportation

Tracy Robinson
Amtrak

How to use this TEACHING GUIDE:

1. Read the lesson overviews and reproduce the corresponding student reproducibles.
2. Display the classroom poster map of Illinois.
3. As you teach each lesson, distribute the accompanying student reproducible.

KEY: For easy reference, look for these curriculum icons within each lesson.



Language
Arts



Geography



Science



Math

Lesson 2: On the Move



Language Arts



Geography



Science



Math

ISAT Test Prep Skill: Physical Science

Student goals: Learn how to identify and apply key terms and equations relative to physical science; solve basic mathematical problems

Time required: 40 minutes

Materials required: **On the Move** student reproducible 2; pen or pencil; computer (if available)

Directions:

1. As a class, review how electrical circuits work and the relationship between electricity and energy. Discuss how train engines use fuel to move a generator, which creates electrical current that moves the train. Visit <http://travel.howstuffworks.com/diesel-locomotive.htm> for more information and diagrams.
2. Distribute **On the Move** student reproducible 2 and read it aloud as a class. Review any new concepts and have students complete each question individually or in pairs.
3. As a class, review students' answers.

(Answer Key: 1. a; 2. b; 3. a; 4. b; 5. b.)

Wrap-up: Ask students to write 2–3 new multiple choice questions, working in pairs. Have student pairs exchange questions to help practice their test-taking skills. You may want to compile a complete list of questions to share with the entire class.

Lesson 3: Outline a Travel Narrative



Language Arts



Geography

Student goal: Learn how to outline a fictional narrative essay

Time required: 40 minutes

Materials required: **Outline a Travel Narrative** student reproducible 3; pen or pencil

Directions:

1. As a class, review the definition and structure of narrative essays. (*Narrative essays tell a story from a specific point of view, usually the author's. These stories make a specific point, defined in the first paragraph. To involve the reader in the writer's experience, narrative essays include specific sensory details and precise nouns, adjectives, and verbs. The following storytelling elements are often included: plot, character, setting, climax, and conclusion.*)
2. Use the following activity to help students brainstorm specific ideas for narrative essays. Read one of the following narrative essay topic ideas, then quickly go around the room and have students give an example of what the main point of the essay might be. For example, the title "My proudest day was..." could generate ideas such as, "The day I rode my bike for the first time," "The day I showed my sister how to write her name," etc. Change topics two or three times.
Topic Ideas
 - My scariest moment was...
 - My family deserves an award because...
 - My favorite thing is...
3. Distribute **Outline a Travel Narrative** student reproducible 3 and read it aloud. Give students 20 minutes to complete.

Wrap-up: As a class, review completed outlines. Students will use their outlines to complete Lesson 4.



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TRACK YOUR TRIP

Student Name: _____

ISAT Test Prep Skill: Physical Science

The United States has many interesting places and unique sites to explore. Between the mountains, winding rivers, deep oceans, and open fields, you'll have lots to see when you travel.

Follow the train routes on your classroom map to answer the questions below.

- 1** The Chain of Lakes region is located _____ of Chicago.
 - a) Northeast
 - b) Southwest
 - c) Northwest
 - d) Southeast
- 2** The State House train takes passengers daily to and from Chicago and St. Louis, MO. Which major river does this train cross?
 - a) Salt Fork River
 - b) Mississippi River
 - c) Ohio River
 - d) Hudson River
- 3** Look out the windows as you travel on the train from Chicago to Carbondale. Which of the following will you probably not see?
 - a) corn
 - b) wheat
 - c) cattle
 - d) cactus
- 4** Traveling from Antioch to Carbonale you will pass through three cities that have a population greater than 50,000. Which three cities are they?
 - a) Kankakee, Waukegan, and Centralia
 - b) Waukegan, Chicago, and Effingham
 - c) Rantoul, Mattoon, and Chicago
 - d) Champaign-Urbana, Waukegan, and Chicago
- 5** On the same route described in question 4, what landmark will you pass?
 - a) Cahokia Mounds
 - b) Lovejoy Homestead
 - c) St. Louis Arch
 - d) Himalayan Mountains
- 6** If you were traveling by train from Chicago to New Orleans, LA, approximately how many miles would you travel?
 - a) 200
 - b) 2,000
 - c) 1,000
 - d) 60



Photo courtesy of Amtrak

Bonus!

Choose one icon from the map of Illinois to research. Write five interesting facts that you learn and use the scale to calculate how many miles it is from your hometown city. (*Tip: If your city is not on the map, choose the city that is closest to your home and/or your school.*)

ON THE MOVE

Student Name: _____

ISAT Test Prep Skill: Physical Science

With so many places to see, it's time to travel! Before you journey to new places, dazzle your friends with your knowledge about the science of trains.

Using your knowledge about energy and motion, answer the questions below. (You may want to check your work by researching your answers online.)

1 Trains need an incredible amount of power to carry passengers safely from place to place.

If the generator inside a diesel engine generates up to 4,700 amps of current, this is an example of:

- a) electrical energy
- b) nuclear energy
- c) chemical energy
- d) solar energy

2 Trains have steel wheels to reduce **friction**, which slows the speed of a train. Friction creates:

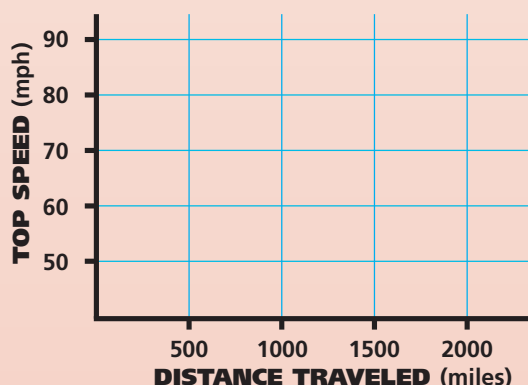
- a) ice
- b) heat
- c) magnetism
- d) water

3 A passenger train with five cars can use 1.5 gallons of fuel per mile. If the train travels at a constant speed, what would happen if more passenger cars were added?

- a) More fuel would be required.
- b) Less fuel would be required.
- c) There would be no change in the amount of fuel used.
- d) The train would travel at a slower speed.

4 Graph the following data in the table:

Train	Top Speed	Distance Traveled
State House	90 mph	500 miles
Illini	70 mph	1,000 miles
Illinois Zephyr	55 mph	1,400 miles



5 If time equals distance traveled divided by speed, how long is a one-way trip on the State House train when traveling at a constant rate?

- a) 6.6 hours
- b) 5.6 hours
- c) 8.6 hours
- d) 7.6 hours

Bonus!

Find out more about how locomotives work! Research one of the following topics and present a short description of what you have learned: traction; steel wheels; power, fuel, and batteries; braking; or driving.



OUTLINE A TRAVEL NARRATIVE

Student Name: _____

A narrative is a way for you to tell a story that includes characters, setting, and plot. Using the lines below, outline a short fictional narrative about the following topic:

Imagine you are a train conductor who travels to stations across the United States. Include details about where your day begins and ends, who you meet on the train, what your responsibilities are, and other details about your travels.

Title of story: _____

Main Character

(central person in the story)

Example: Train conductor: He played with model trains as a child and pursued his dream to be a train conductor.

Setting

(where and when the story takes place)

Example: The engineer's cab as it pulls out of the station in the morning.

Plot: First Main Event

(order of events)

Example: A passenger knocks on the door of the engineer's cab asking to talk to the conductor.

Secondary Characters

Secondary Setting

Second Main Event

Now that you have completed your outline above, draft an opening line.

Story opener: Draft an initial story sentence that captures the attention of your audience. Begin to establish the setting and identify the main character.

Predict how your story may end by writing a closing line. The closer may change as you develop your story.





Story closer: Draft a closing sentence that summarizes your story. This sentence can be open-ended, leaving the audience guessing about what happens next, or close-ended, providing a short summary of the overall story.

Bonus!

Use these tips to self-edit your essay:

- Tell the story from a specific point of view
- Clarify the main idea of the essay
- Use vivid language
- Include storytelling elements such as dialogue, conflict, plot, and climax

Illinois Curriculum Standards and Benchmarks

	STANDARD	BENCHMARK	LESSON		
			1	2	3
 Language Arts	READING				
	Students apply word analysis and vocabulary skills to comprehend selections	Read and comprehend unfamiliar words using root words, synonyms, antonyms, word origins, and derivations			
	Students apply reading strategies to improve understanding and fluency	Establish purposes for reading; survey materials; ask questions; make predictions; connect, clarify, and extend ideas Read age-appropriate material aloud with fluency and accuracy	•	•	
	Comprehension Students comprehend a broad range of reading materials	Connect information presented in tables, maps, and charts to printed or electronic text Make and support inferences and form interpretations about main themes and topics	•	•	
	WRITING				
 Geography	Students use correct grammar, spelling, punctuation, capitalization, and structure	Write paragraphs that include a variety of sentence types; appropriate use of the eight parts of speech; and accurate spelling, capitalization, and punctuation			•
	Students compose well-organized and coherent writing for specific purposes and audiences	Establish central idea, organization, elaboration and unity in relation to purpose and audience Edit documents for clarity; proofread for spelling, capitalization, and punctuation; and ensure that documents are formatted in final form for submission and/or publication			•
	Students communicate ideas in writing to accomplish a variety of purposes	Write for a variety of audiences and for specified audiences in a variety of forms including narrative, expository, and persuasive writings	•		•
	Listening and Speaking Students listen and speak effectively in a variety of situations	Demonstrate understanding of the listening process			•
	Students locate, describe, and explain places, regions, and features on Earth	Compare the physical characteristics of places, including soils, landforms, vegetation, wildlife, climate, and natural hazards Use maps and other geographic representations and instruments to gather information about people, places, and environments	•	•	
 Science	Students understand relationships between geographic factors and society	Describe the relationships among location of resources, population distribution, and economic activities	•		
	Students understand Illinois, United States, and world social history	Describe key figures and organizations in the social history of the local community			•
	Students know and apply concepts that describe force and motion and the principles that explain them	Explain constant, variable, and periodic motion Demonstrate and explain ways that forces cause actions and reactions		•	
				•	
 Math	Students investigate, represent, and solve problems using number facts, operations and their properties, algorithms, and relationships	Solve one- and two-step problems involving whole numbers, fractions, and decimals using addition, subtraction, multiplication, and division	•	•	